

JET Meeting Minutes

January 20, 2015

Participants

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Action Items - new

1. JJ Jamison will provide additional information on the Juniper 100G firewall at the February JET meeting.

Action Items - carryover

1. If you wish to participate in the Emerging Technology Coordination (ETC) group, please contact Grant Miller at: miller@nitrd.gov.
2. If you are interested in using the NOAA DC area ring, contact Rob Sears <robert.sears@noaa.gov>.

Proceedings

This meeting of the JET was chaired by Vince Dattoria of DOE and Kevin Thompson of the NSF.

Network Roundtable

NASA Networking: Bobby Cates

NASA is having a TIC audit in the April/May time frame. This is driving their installing a symmetrical WAN. NASA has SIP as the inside network and PIP as the outside network. The outside network is 297 where peering takes place. The inside network is 270. NASA will decommission its Chicago Equinox TIC. They will maintain TICs at Marshall, Ames, Goddard, and Johnson.

NIH: Mike Gill

NIH is about 1 month out from changing its MAX and Ashburn links; the MAX will be its primary link and Ashburn will be the backup link.

ESnet: Nick Buraglio

ESnet in Europe was transitioned to production as part of the ESnet network and retired as a separate service. ESnet is also strengthening its internal services. They are working on the LHCONE network and BRF.

NOAA: Dave Hartzell

The NOAA backbone has been stable. NOAA is deploying its TICs. The Hawaii TIC is partially up. Dallas/Fort Worth will be implemented next; they are currently installing some of the equipment there. In Washington, DC the equipment is in place to support a 100G ring that will be lit the 2nd week of February.

PacWave: Jonah Keough

PacWave is implementing new 100G connections. CANARIE will connect soon. They are working on more US backbone links.

CAAREN: Andrew Gallo

CAAREN is now connected to Georgetown University (as of December 31, 2014).

Exchange Points Roundtable**Pacific Northwest GigaPoP (PNWGP): Jonah Keough**

Nothing new to report

Ames PoP: Will Habeck/Bobby Cates

Ames upgraded to 2 x 100G links to the Palo Alto Exchange.

StarLight: Joe Mambretti

StarLight launched a new project to upgrade StarLight with a budget of \$2million. They are implementing a new set of UPS systems, new airconditioning, a new generator and additional rack space. StarLight is working with Cal Tech to transition the LHCONE services to ESnet. Cal Tech is also working with StarLight on new innovations.

StarLight is planning a new project on Data Reservoir on a 100G experimental network.

StarLight is planning to support demonstrations of Software Defined Exchanges (SDXs) at GWU for the March GENI Engineering Conference (GEC) in Arlington, Virginia. They are preparing for an LHC private optical networking conference in England in February, looking toward a March LHC restart.

StarLight is working to implement a 100G private fiber link to Seattle in support of the PNWGP.

CC-DNI: Kevin Thompson

Over the holidays, NSF announced the fourth year solicitation for Campus CyberInfrastructure- Data, Networking and Innovation (CC-DNI); solicitation number 15-534. It has a due date of March 24, 2015. It provides \$23-28 million in new funding to upgrade campus cyberinfrastructure to implement :

- Science DMZs
- Increase bandwidth to Internet2
- Upgrade campus networking
- Support instrument networking

It supports 2 new categories of upgrades including:

- Data infrastructure building blocks
- Instrument networking

It encourages multi-campus, multi-institution cooperation to provide regional networking infrastructure and development of regional networking expertise.

100G Juniper Firewall: JJ Jamison

Juniper is working with customers to implement routers and switches in Science DMZs. They are currently beta testing a 100G firewall for data flows. They are doing this by having some processing blades use ASICs. A processing arbiter decides which equipment the data flows go to. It is by address so all flows from a given address are routed through the same path regardless of size. You have to specify which flows will go through the ASIC (by originating source). Juniper is doing an internal Proof of Concept (POC) in Sunnyvale and will then transition to an external POC and then to a trial with a Federal agency. The equipment supports the Science DMZ, HIPAA, and stateful firewalls. The equipment is named Firewall SRX. Juniper 5000 series is needed to support his firewall. The ASIC services are named Services Offload.

AI: JJ Jamison will provide additional information on the Juniper 100G firewall at the February JET meeting.

Meetings of Interest:

January 21-22	perfSONAR Deployment Best Practices , Architecture, and Moving the Needle, Columbus, OH
February 2-4	NANOG63 , San Antonio, TX
February 10-11	CrossConnects Cosmology Workshop , Berkeley, CA
March 1-6	APAN39 , Fukuoka, Japan
March 22-27	IETF92 , Dallas, TX
March 23-26	GEC22 , Washington, DC
March 26-27	GLIF Techs, Arlington, VA
March 24-25	ESCC , Berkeley, CA
March 31 - April 2	International OpenFlow/SDN Testbeds , North Miami, FL
April 26-30	Internet2 Global Summit , Washington, DC
June 1-3	NANOG64 , San Francisco, CA
June 15-18	TNC2015 , Porto, Portugal
June 15-18	GEC23 , Urbana Champaign, IL

July 14-17 SDI next steps planning and coordination, Berkeley, CA
July 19-24 [IETF93](#), Prague, Czech Republic

Next JET Meetings:

February 17, 2015 11:00-2:00, NSF

March 17, 2015 11:00-2:00, NSF